IN THE CLAIMS:

The following is a complete listing of the claims in this application, reflects all changes currently being made to the claims, and replaces all earlier versions and all earlier listings of the claims:

Claim 1. (Currently Amended) An image pickup apparatus, comprising:

~~an output unit which outputs a first electric signal corresponding to a first light flux included in light fluxes respectively from different areas dividing an exit pupil area of an imaging optical system, and a second electric signal corresponding to a second light flux different from the first light flux, included in the light fluxes; and~~

a plurality of pixel units each including a first sensitive area corresponding to a first light flux of light fluxes respectively from different areas dividing an exit pupil area of an imaging optical system ~~for outputting the first electric signal~~, and a second sensitive area corresponding to a second light flux of the light fluxes, different from the first light flux ~~for outputting the second electric signal,~~; and

an output unit which outputs a first electric signal and a second electric signal to detect a phase difference between the first electric signal and the second electric signal, from said plurality of pixel units,

wherein the first sensitive area and the second sensitive area are arranged ~~to each include a sensitive area~~ so that each of the first electric signal ~~light flux~~ and the second electric signal, output by said output unit, includes signals generated in the first sensitive area and the second sensitive area ~~light flux overlap each other on a light receiving surface of the sensitive~~

~~area~~.

Claim 2. (Withdrawn) An apparatus according to claim 1, wherein said plurality of pixel units includes at least two types of pixel units having different separation directions of said first and second photoelectric conversion units.

Claim 3. (Withdrawn) An apparatus according to claim 1, wherein said plurality of pixel units includes at least two types of pixel units having different sensitivity regions.

Claim 4. (Previously Presented) An apparatus according to claim 1, wherein the first and second sensitive areas are formed on the basis of an F-number of the imaging optical system in detection of focus.

Claim 5. (Withdrawn) An apparatus according to claim 1, wherein each of the pixel units has a common amplification element adapted to amplify and output a signal from the first photoelectric conversion unit and a signal from the second photoelectric conversion unit, a first transfer switch adapted to transfer the signal from said first photoelectric conversion unit to said common amplification element, and a second transfer switch adapted to transfer the signal from said second photoelectric conversion unit to said common amplification element.

Claim 6. (Withdrawn) An apparatus according to claim 5, further comprising a drive circuit adapted to control a first mode in which the signals from said first and second

photoelectric conversion units are added by an input unit of said common amplification element and output, and a second mode in which the signals said the first and second photoelectric conversion units are independently output from said common amplification element.

Claim 7. (Withdrawn) An apparatus according to claim 1, further comprising

an A/D conversion circuit adapted to convert a signal from the image pickup element into a digital signal, and

a digital signal processing circuit adapted to process the signal from said A/D conversion circuit.

Claim 8. (Withdrawn) An image pickup apparatus comprising:

a first semiconductor region having a first conductivity type;

a second semiconductor region formed in said first semiconductor region and having a second conductivity type different from the first conductivity type;

a third semiconductor region formed in said first semiconductor region and having the second conductivity type different from the first conductivity type, wherein said second and third semiconductor regions are photoelectric conversion units formed adjacent to each other, and

a fourth semiconductor region having the first conductivity type is formed between said second semiconductor region and said first semiconductor region, wherein said third semiconductor region is formed under an opening.

Claim 9. (Withdrawn) An apparatus according to claim 8, wherein a common microlens is arranged over said second and third semiconductor regions.

Claim 10. (Withdrawn) An apparatus according to claim 8, further comprising

an A/D conversion circuit adapted to convert a signal from said image pickup element into a digital signal, and

a digital signal processing circuit adapted to process the signal from said A/D conversion circuit.